

# Mammalia, Chiroptera, Phyllostomidae, *Lampronycteris brachyotis* (Dobson, 1879): First confirmed record for Ecuador

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**ABSTRACT:** Herein we report the first record for *Lampronycteris brachyotis* in Ecuador, which extends its range about 570 km west of the nearest previously known published record in Loreto, Peru. We captured an adult male on 31 October 2008 in Tarangaro, near the Manderoyacu River, Pastaza province. This locality is placed in a flat, periodically flooded river valley, with small estuaries. The forest is well preserved with high canopy trees. There also are small agricultural patches in the zone.

*Lampronycteris brachyotis* (Dobson, 1879), the Yellow- or Orange-throated Bat, is known from southern Veracruz and Oaxaca (Mexico), southward through Central America, to Venezuela, Colombia, the Guianas, Peru, Brazil, into the Amazonian Basin, Trinidad (Medellín *et al.* 1985; Linares 1998; Simmons 2005; Williams and Genoways 2008) and Bolivia (Acosta and Aguanta 2005; Aguirre and Terán 2007). Herein we report the first record for this species in Ecuador, which extends its range about 570 km west of the nearest previously known published record in Centro de Investigaciones Jenaro Herrera, Loreto, Peru (Solari *et al.* 1999; Williams and Genoways 2008) (Figure 1).

Elevation records include localities from sea level to 525 m in humid tropical forests (Davis *et al.* 1964; Villa-R. 1967; Medellín *et al.* 1985). Although this species is widely distributed in Neotropical lowlands, it is uncommon to rare throughout its range (Medellín *et al.* 1985; Linares 1998; Simmons and Voss 1998). This species occurs mainly in primary forests, but it is occasionally found in secondary forests and clearings (Marinkelle and Cadena 1972; Husson 1978; Humphrey *et al.* 1983; Medellín *et al.* 1985; Reid 1997).

On 31 October 2008, we captured an adult male of *L. brachyotis* (Figure 2) associated with fieldwork on the Villano Biodiversity Project. The individual was retained as a fluid voucher (75 % ethanol) with the skull removed and cleaned. The individual is deposited in the Mammal Division of Museo de Zoología (QCAZ 10749) at the Pontificia Universidad Católica del Ecuador, in Quito.

This individual was collected in Tarangaro, a Huaorani community near the Manderoyacu River ( $1^{\circ}24'3.2''$  S,  $77^{\circ}22'58.5''$  W, elevation 290 m), Pastaza province, in the eastern tropics of Ecuador. Tarangaro is located in a flat, periodically flooded river valley, with small estuaries that flow into the Manderoyacu River. The forest is well preserved with high canopy trees exceeding 40 m. The most representative species of flora are: *Lindackeria palludosa* (Achariaceae), *Matisia obliquifolia*

(Bombacaceae), *Vismia baccifera* (Clusiaceae), *Sloanea grandiflora* (Elaeocarpaceae), *Grias neuberthii* and *Gustavia longifolia* (Lecythidaceae), *Guarea silvatica* (Meliaceae), *Brosimum utile* (Moraceae), *Pentagonia macrophylla* and *Wittmackanthus stanleyanus* (Rubiaceae), and *Leonia glycycarpa* (Violaceae). There also are small agricultural patches in the zone. Topography is relatively flat with slopes ranging from 5 to 30 %.

The fieldwork in Tarangaro was conducted from August 19 to November 7, 2008. In fieldwork, we used 10 mist nets along a 1 km transect. The nets were opened five hours per day for 18 nights. It gives a capture effort of 900 net hours. We captured 155 individuals belonging to 21 species, 15 genera and two families, being Phyllostomidae the most diverse.



**FIGURE 1.** Distribution of *Lampronycteris brachyotis* according to Williams and Genoways (2008). Point 1 represents our record reported in this study; point 2 represents nearest previously known record from Centro de Investigaciones Jenaro Herrera, Loreto, Peru ( $04^{\circ}55'$  S,  $73^{\circ}45'$  W).

From the 155 individuals captured, one individual was confirmed as *Lampronycteris brachyotis*. It was captured in a mist net placed about 3 m above the ground at 20:00 h. Other species of bats captured at this locality during the same fieldwork period included *Cormura brevirostris* (J. A. Wagner, 1843); *Anoura aequatoris* (Lönnberg, 1921); *Artibeus lituratus* (Olfers, 1818); *A. obscurus* (Schinz, 1821); *A. planirostris* (Spix, 1823); *Carollia brevicauda* (Schinz, 1821); *C. castanea* H. Allen, 1890; *C. perspicillata* (Linnaeus, 1758); *Dermanura anderseni* (Osgood, 1916); *D. glauca* (O. Thomas, 1893); *Lonchophylla thomasi* J. A. Allen, 1904; *Phyllostomus elongatus* (E. Geoffroy, 1810); *Platyrrhinus incarum* (O. Thomas, 1912); *Rhinophylla fischerae* D. C. Carter, 1966; *R. pumilio* W. Peters, 1865; *Sturnira lilium* (E. Geoffroy, 1810); *Trachops cirrhosus* (Spix, 1823); *Vampyriscus bidens* (Dobson, 1878); *Vampyressa thyone* O. Thomas, 1909 and *Vampyrodes caraccioli* (O. Thomas, 1889).

External and cranial measurements (in mm) of the specimen are the following: head and body length, 53.5; tail length, 11.7; hindfoot length, 13.4; ear length, 16.8; forearm length, 39.8; leaf-nosed length, 8.4; calcar length, 11.6; caudal membrane length, 24.9; greatest length of skull, 21.7; condylobasal length, 19.6; zygomatic breadth, 10.7; braincase breadth, 8.9; palatal length, 9.5; postorbital constriction, 4.9; interorbital breadth, 5.8; breadth across canines, 2.7; breadth across molars, 6.5; maxillary tooth row length, 8.4; mandibular length, 14.7. Body weight, 14 g. All measurements are within the known range for the species (Sanborn 1949; Medellín *et al.* 1985; Williams and Genoways 2008).

This individual had typical diagnostic features of *L. brachyotis* (Sanborn 1949; Medellín *et al.* 1985; Williams and Genoways 2008), including relatively small and pointed ears not connected by an interauricular band with a concave upper outer rim; a small nose leaf with a narrow, sharply pointed lancet; a fifth metacarpal that was the shortest of metacarpals and a third metacarpal that was the longest, characters shared only with desmodontines (Wetterer *et al.* 2000); and a long calcar (11.6 mm) about the same length as foot, a diagnostic character to differentiate it from *Trinycteris nicefori* Sanborn, 1949 (which has a calcar about half the length of the foot, Simmons 1996), the most similar species to be confused with *L. brachyotis* in Ecuador. Dental diagnostic features also are similar to those described by Sanborn (1949) and Medellín *et al.* (1985): upper inner incisors chisel-shaped, bifid and in line with canines; outer incisors bifid with elongated medial cusp in contact with inner incisors; lower incisors trifid; upper premolars straight; and last upper premolar long and narrow.

**ACKNOWLEDGMENTS:** Research was funded by Eni E&P Division and Agip Oil Ecuador and has been carried out with the participation of Fauna & Flora International (FFI). We thank Gabriela Arévalo, Paula Iturrealde, Viviana Narváez and Nicolás Peñafiel for assistance in the field; Daniel Chávez for his help in preparing the skull of the specimen; and Mika Peck for reviewing the English version.

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FIGURE 2. *Lampronycteris brachyotis* from Tarangaro, near Río Manderoyacu, Pastaza province, Ecuador.

RECEIVED: February 2010  
 REVISED: April 2010  
 ACCEPTED: April 2010  
 PUBLISHED ONLINE: May 2010  
 EDITORIAL RESPONSIBILITY: Marcelo R. Nogueira